

AMENDMENTS TO THE CLAIMS

Claim 1. (Currently Amended) In a nanochannel substance in which an oxide layer contains a surfactant micelle, a nanochannel structure containing a functional molecule, ~~characterized in that,~~ wherein a functional molecule is contained in the nanochannel.

Claim 2. (Original) The nanochannel structure containing a functional molecule according to claim 1, wherein the oxide layer mainly comprises silicon oxide.

Claim 3. (Original) The nanochannel structure containing a functional molecule according to claim 1, wherein the functional molecule is a chelate molecule.

Claim 4. (Original) The nanochannel structure containing a functional molecule according to claim 1, wherein the nanochannel substance is subjected to a treatment of making it hydrophobic.

Claim 5. (Original) The nanochannel structure containing a functional molecule according to claim 4, wherein the nanochannel substance contains an agent for making hydrophobic.

Claim 6. (Original) The nanochannel structure containing a functional molecule according to claim 5, wherein the nanochannel substance in which the oxide layer mainly comprises silicon oxide contains a silane coupling agent.

Claim 7. (Currently Amended) A nanochannel thin film containing a functional molecule ~~which is characterized in that any of~~ wherein the nanochannel structures ~~mentioned in claims 1 to 6~~ structure is arranged in a form of thin film on a solid substrate.

Claim 8. (Original) The nanochannel thin film containing a functional molecule according to claim 7, wherein the nanochannel is sedimented in many layers on a solid substrate in a three-dimensional manner.

Claim 9. (Currently Amended) A method for the manufacture of a nanochannel structure containing a functional molecule, ~~characterized in that,~~ wherein a nanochannel substance where an oxide layer contains a surfactant micelle is formed from an acidic aqueous solution of alcohol containing a surfactant and an alkoxide compound which is able to form an oxide and then a functional molecule is impregnated in the nanochannel substance

Claim 10. (Original) The method for the manufacture of a nanochannel structure containing a functional molecule according to claim 9, wherein a hydrophobically treating agent is added to the acidic aqueous solution of alcohol.

Claim 11. (Original) The method for the manufacture of a nanochannel structure containing a functional molecule according to claim 10, wherein heating or drying is conducted on a solid substrate to form a nanochannel substance on its surface and then a functional molecule is impregnated in the nanochannel substance.